Lumination™ LED Luminaires

2' x 2' Recessed Troffer
ET22 Series Powered by Intrinsx™

Project name _____
Date _____
Type _____

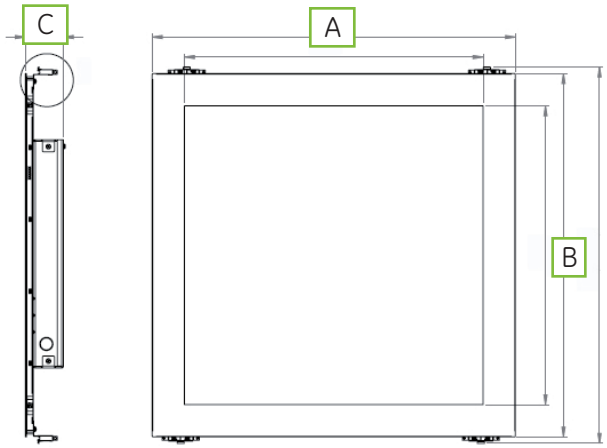
Product Description:

The Lumination ET Series recessed LED troffer with Intrinsx technology is a commercial luminaire utilizing an advanced LED optical system to achieve superior performance. It provides high uniformity, excellent efficiency, improved spacing criteria, and reduced glare. The ultra thin profile, and improved lumen maintenance of L85 of initial lumens at 50,000 hours of operation, allows for ease of installation and lower maintenance costs over time. It is suitable for indoor general lighting.

Performance Summary:

Features Intrinsx™ technology
Distribution Patterns: Medium & Wide
Delivered Lumen Output: 3500-3900 Lm
System Input Power: 42W
Efficacy: 85 LPW
Input Voltage: 120-277V, 347V
Standard Dimming Control: 0-10V, DALI
Dimming Compatibility: refer to Lutron.com, Leviton.com
CCT: 3000K, 3500K, 4000K
CRI: 80, R9: >0
Color Consistency: 4 Step MacAdam Ellipse
Lifetime Rating: 50,000 Hours @ L85
Input Frequency (Hz): 50/60Hz
Power Factor: >0.9
Unified Glare Rating: <19/22 depending on beam pattern for office applications in compliance of EN 12464
Mounting: Fits standard T-Bar grid (drop ceilings)
Weight: <16 lbs
IC rating: Non-IC Rated
Warranty: 5 Years standard or 10 years available
Files Available: LM79, LM80, IES, Revit

Product Dimensions:



UL Version: A = 23.8in B = 23.8in C = 2.5in or A = 605mm B = 605mm C = 63mm
UL Version with 'M' metric option: A = 595mm B = 595mm C = 63mm
CE Version: A = 595mm B = 595mm C = 63mm

Awards:

Certified by:

DESIGNLIGHTS CONSORTIUM

a product of ecomagination℠

Medium Distribution Only

Ordering Information:

E T - 22 - _ _ - _ - A - _ - WHTE - _ _ _

INTERNAL CODE	FIXTURE TYPE (NOMINAL)	VOLTAGE	OPTICAL CODE	MOUNTING	CONTROLLER	FINISH	OPTIONS
E = Edge Lighting **T** = Troffer	**22** = 2' X 2' (600x600mm)	**0** = 120-277V (UL Version) **7** = 120-240V (CE Version) **D** = 347V		**A** = Lay-in-T-Grid	**V** = 0-10V **D** = DALI	**WHTE** = White	Blank if no options **E** = Lutron Ecosystem Module (integrated into luminaire) **H** = Chicago Plenum, CCEA **EH** = Lutron Ecosystem Module & Chicago Plenum, CCEA **M** = Metric Trim (595mm X 595mm) **EL** = Emergency battery backup (1400 Lm) Contact your local GE representative for special orders and product modifications.

OPTICAL CODE	TYPE	CRI	COLOR TEMP (K)	TYPICAL LUMENS	SYSTEM WATTAGE
A1	Medium	80	3000	3500	42
A2	Medium	80	3500	3700	42
A3	Medium	80	4000	3900	42
B1	Wide	80	3000	3500	42
B2	Wide	80	3500	3700	42
B3	Wide	80	4000	3900	42

ACCESSORIES	DESCRIPTION CODE	PRODUCT CODE
Drywall Mount Kit (Imperial)	GESK07	67657
Louver Kit	GESK05	67658
Surface Mount Kit	GESK06	67656

imagination at work

Photometric Data: Lumination™ 2' x 2' Recessed Troffer ET 22 Series

Medium: ET22XA3-4000K.ies

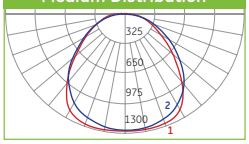
CANDLEPOWER SUMMARY			
Angle	0°	45°	90°
0°	1185	1185	1185
5°	1193	1189	1186
10°	1200	1189	1178
15°	1206	1186	1164
20°	1205	1174	1142
25°	1188	1149	1109
30°	1138	1104	1065
35°	1044	1030	1007
40°	912	922	933
45°	771	794	843
50°	635	666	737
55°	517	547	622
60°	419	439	506
65°	333	346	397
70°	256	265	297
75°	183	190	206
80°	114	121	126
85°	45	53	58
90°	0	1	7

COEFFICIENTS OF UTILIZATION																		
RC	80%				70%				50%			30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	47	57	51	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

LUMINANCE DATA (candela/m²)			
Angle	0°	45°	90°
45°	2931	3019	3205
55°	2423	2564	2915
65°	2118	2201	2525
75°	1901	1974	2140
85°	1388	1635	1789

ZONAL LUMEN SUMMARY		
Zone	Lumens	% of Fixture
0-30°	974	29%
0-40°	1615	48%
0-60°	2741	81%
0-90°	3369	100%

Polar Curves
Medium Distribution



Wide: ET22XB3-4000K.ies

CANDLEPOWER SUMMARY			
Angle	0°	45°	90°
0°	841	841	841
5°	845	851	841
10°	857	874	842
15°	874	910	841
20°	896	956	837
25°	921	1014	832
30°	948	1077	824
35°	971	1140	811
40°	912	1184	787
45°	964	1197	750
50°	916	1159	698
55°	827	1059	620
60°	670	903	521
65°	552	715	410
70°	402	524	299
75°	265	345	197
80°	149	193	111
85°	60	77	44
90°	2	2	2

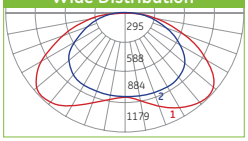
COEFFICIENTS OF UTILIZATION																		
RC	80%				70%				50%			30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	86	84	82
2	97	89	81	75	95	87	80	74	83	77	73	80	75	71	77	73	69	67
3	88	77	68	61	85	75	67	61	72	65	59	69	63	58	67	62	57	55
4	80	67	58	51	78	66	57	50	63	56	50	61	54	49	59	53	48	46
5	73	59	50	43	71	58	49	42	56	48	42	54	47	41	52	46	41	39
6	67	53	43	37	65	52	43	36	50	42	36	48	41	36	47	40	35	33
7	62	47	38	32	60	47	38	32	45	37	31	43	36	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	27	39	32	27	38	32	27	25
9	53	39	30	25	52	38	30	25	37	30	24	36	29	24	35	29	24	22
10	50	36	27	22	48	35	27	22	34	27	22	33	26	22	32	26	22	20

NOTE: Floor Reflectance : 20%

LUMINANCE DATA (candela/m²)			
Angle	0°	45°	90°
45°	4335	3439	2694
55°	4737	3617	2746
65°	4350	3266	2468
75°	3425	2560	1947
85°	2270	1737	1299

ZONAL LUMEN SUMMARY		
Zone	Lumens	% of Fixture
0-30°	757	20%
0-40°	1366	37%
0-60°	2841	76%
0-90°	3739	100%

Polar Curves
Wide Distribution



Product Specifications:

For more information and access to all of our resources, including our design tool visit: **www.gelighting.com**

Optical System:

Lumination LED Luminaires use Intrinsx™ technology to deliver superior performance and greater control of how the light is distributed. This allows for better spacing of fixtures while still providing good uniformity on the task plane and face of the luminaire. Intrinsx™ helps to create a space that feels brighter, cleaner and more modern with improved efficiency and reducing the "cave effect" associated with recessed luminaires.

- Precision formed optical assembly comprised of injection molded high specularity reflectors, and an injection molded conformal transmissive lens.
- High optical grade acrylic providing good efficiency and impact resistance
- LED light engine consists of a precision die-cast aluminum heat sink, a Metal Core Printed Circuit Board Assembly (MCPCB)
- Beam Uniformity: Du'v' = 0.0008
- Luminance Uniformity: 2:1 max to min
- No visible diodes

Construction:

- Durable, long lasting bezel construction. Steel, Electrogalvanized, Cold-rolled, Commercial quality coated with Electrostatic Powder Coat Paint
- IP Rating: IP30
- Impact Resistance: IK=3

Electrical System:

- Class 1, replaceable, high efficiency LED driver rated for 100,000 hours when used within operating conditions.
- Audible Noise – Per 29CFR 1910 sub part G: <24 dba (1 foot)
- Thermal overload protection shuts down the luminaire when system temperatures exceed designed operating conditions
- THD: <20%
- Transient Protection: 100 kHz ring wave, 2.5 kV level
- Environmental Testing: High Temperature High Humidity: 60°C /90% (non-condensing)
- Electronic Vibration Testing: Multi Axis, Random Vibration Profile: 2-2000 Hz, 5Gs on electronics
- Input Current: 120V/42W - 375mA
  230V/42W - 190mA
  277V/42W - 165mA

Installation:

- Drivers and internal components accessed via plenum. Driver box may be removed from fixture during service. Suitable for damp locations.
- T-grid mounting brackets provided with luminaire. Mounting holes provided for hanging wire.
- Integrated galvanized PSU enclosure delivers low profile and ease of installation
- Seismic Rating: Earthquake/Hurricane clips provided standard. Bracket security test per UL1598 Fixture mounted to grid and inverted for 60 sec.
- Luminaire Vibration Testing: Luminaire test to 1.5 G, 100,000 cycles per axis, 2 axis

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